

**REMARKS**

In the specification, the paragraph beginning at page 9, line 1, the paragraph beginning at page 10, line 9, the paragraph beginning at page 11, line 4, the paragraph added following the first complete paragraph on page 11 have been amended to correct editorial problems and to better describe the invention. Adequate support for the amendments is provided in the specification and in the figures.

Claims 1-24 are pending in the application with Claims 1, 8, 15 and 21 being in independent form. By the present amendment, Claims 1-4, 6-8, 14 and 15 have been amended, Claims 5, 21, 22, 23 and 24 have been cancelled and new Claims 25-40 have been added. Claims 1, 8, and 15 and the specification have been amended to include subject matter substantially recited by cancelled Claim 5. Therefore, no new matter is believed to be introduced by the amendments.

Adequate support for the amendments is provided in the specification and in the figures. Support for new claims 25-40 is provided specifically in the specification at:

page 7, lines 5-12: "The received RF signal, for communications protocol synchronization or acknowledgement purposes, is conducted to the wireless transceiver 14 which performs RF demodulation and thereupon the analog baseband signal is processed in a signal processor 22, preferably a single integrated circuit, which comprises an amplifier, a bandpass filter, a multiplier for sampling the received signal at a rate controlled by a counter to produce a sampled signal, a peak detector for determining the magnitude and duration of the peaks in the sampled signal, an automatic gain controller, and a digitizer for converting the analog sampled signal to a digital signal.";

page 8, lines 16-20: "The contacts associated with the sensor 32 detects the data encoded in the chip and generates an electrical data signal which is then processed and digitized in the signal processor 22 to obtain a digital signal which is conducted to the RF transceiver 12 for transmission to an external computer network, or to the CPU 24 for further processing in accordance with a stored algorithm.";

page 9, lines 1-5: "As described so far, the RF transceiver 12 and the auto ID reader circuit 30 share the common CPU 24 and, preferably share some of the signal processing and digitizer components in the signal processors 22. Various aspects of the signal processors 22 may be implemented in digital circuitry, or in computer hardware, firmware, software, or in combinations of them."; and

page 10, lines 19-20: "In the event a second auto ID reader is included in the module 10, data signals from the reader are also preferably processed in the common signal processor 22."

Amended Claims 1, 8 and 15 are believed to be patentably distinct over the prior art recited by the Examiner, primarily U.S. Patent No. 5,640,002 issued to Ruppert et al. ("Ruppert et al."). Specifically, amended Claim 1 recites in part "...wherein at least one of said first and second auto ID reader is an interchangeable module that can be interchanged with modules including: a bar code symbol reader module, a smart card reader module, a digital sensor module, a biometric sensor module, a magnetically encoded data reader module, an RFID reader module, and an optical code reader module". Claims 8 and 15 include similar recitations.

Ruppert et al. discloses a device having components including an RF transceiver, a bar code reader, an RFID tag reader and a card reader, where the card reader

communicates with multiple circuits for providing multiple functions including contact smart card reading, a non-contact smart card reading and magnetic stripe reading. The components are not shown to be interchangeable modules, but are shown to be individually configured for simultaneously interfacing with the shared processor 320, as shown in FIG. 19 of Ruppert et al. Accordingly; processor 320 is programmed for communication with each individual component. Interchanging of components, including by definition, substitution of one component for another, is not shown or suggested by Ruppert. Furthermore, removal or additions of components interfacing with a shared processor such as processor 320 would not be possible without reconfiguration of hardware and/or software of the components, any interfaces between the components and the processor and/or the processor.

Ruppert et al. does not disclose or suggest a data collection assembly where at least one of a first and a second reader is an interchangeable module that can be interchanged with modules including: a bar code symbol reader module, a smart card reader module, a digital sensor module, a biometric sensor module, a magnetically encoded data reader module, an RFID reader module, and an optical code reader module, as recited by Applicants' Claims 1, 8 and 15. Therefore, it is believed that Claims 1, 8 and 15 are believed to be patentably distinct over Ruppert et al., and allowance thereof is respectfully requested. Dependent Claims 4-7, 10-14 and 16-19 depend from Claims 1, 8 and 15 and thus are limited by the language found therein. Accordingly, for at least the reasons given above for Claims 1, 8 and 15, Claims 4-7, 10-14 and 16-19 are believed to be patentably distinct over Ruppert et al., and allowance thereof is respectfully requested.

In addition to the reasons provided above with respect to patentability of amended Claims 1, 8, 25, new Claims 25-27, which depend from Claim 1, Claims 29-31, which depend from Claim 8, Claims 33-35, which depend from Claim 15 and independent Claims 37 and 39 are believed to be patentably distinct over Ruppert et al. Claims 25-27, 29-31, 33-35, 37 and 39 include subject matter relating to signal processing circuitry shared by one or two auto ID readers and/or the RF transceiver. Ruppert et al. does not disclose or suggest shared signal processing circuitry. Accordingly, Claims 25-27, 29-31, 33-35, 37 and 39 are believed to be patentably distinct over Ruppert et al., and allowance thereof is respectfully requested.

In addition to the reasons provided above with respect to patentability of amended Claims 1, 8, 25, new Claim 28, which depends from Claim 1, new Claim 32, which depends from Claim 8, new Claim 36 which depends from Claim 15 and new Claims 38 and 40 are believed to be patentably distinct over Ruppert et al. Claims 28, 32 and 38 include subject matter relating to provision of digitized signals by the signal processing circuitry to the RF transceiver for transmission by the RF transceiver to at least one remote computer or to a digital processing device for further processing in accordance with an algorithm. Claims 36 and 40 include subject matter relating to processing and digitizing of signals and providing the digitized signals directly to the RF transceiver for transmission by the RF transceiver to at least one remote computer.

Ruppert et al. does not show provision of digitized signals by signal processing circuitry to the RF transceiver or to a digital computing device, nor does Ruppert et al. show processing and digitizing of signals transmission of the digitized signals directly to the RF transceiver for transmission to at least one remote computer. On the contrary,

Ruppert et al. shows readers providing digitized signals to the processor 320, but not to the RF transceiver 307, and transmission by the processor 320 to the RF transceiver 307 for transmission by the RF transceiver 307 to a remote computing device. Accordingly Claims 32, 36, 38 and 40 are believed to be patentably distinct over Ruppert et al., and allowance thereof is respectfully requested.

Respectfully submitted,

  
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